

DESCRIPTION OF I-LIGHT 2 BY ROUTE

<u>Routes</u>	<u>Estimated Number Of Optical Miles</u>	<u>Number of Fibers</u>	<u>Route Status</u>	<u>Underlying Owner/IRU Holder</u>
<u>Fiber from Indiana Fiber Works</u>				
Henry Street to Dawson POP	5.40	4	Complete	IFW (own)
Bloomington POP to Columbus POP	46.90	4	Complete	IFW (own)*
Columbus POP to Crothersville	35.30	4	Complete	IFW (own)
Crowthersville to Jeffersonville	45.90	4	Complete	IFW (own)
Columbus POP to Shelbyville POP	29.20	4	Complete	IFW (own)*
Shelbyville POP to Dawson POP	33.40	4	Complete	IFW (own)
Dawson POP to Fishers POP	25.90	4	Complete	IFW (own)
Fishers POP to Anderson POP	34.20	4	Complete	IFW (own)
Anderson POP to Muncie POP	23.80	4	Complete	IFW (own)
Muncie POP to Marion POP	40.00	4	Complete	IFW (own)
Marion POP to Kokomo CO	30.30	4	Complete	USSignal (IRU)
Kokomo CO to Michigantown 3-way	21.4	4	Complete	USSignal (IRU)
Michigantown 3-way to Sedalia	8.90	4	Complete	IFW (own)
Sedalia to Downtown Lafayette CO	25.90	4	Complete	IFW (own)
Downtown Lafayette CO to Purdue	2.14	4	Available 8/31/04	IFW (own)
Marion POP to Markle Hut	41.00	4	Complete	IFW (own)
Markle Hut to Fort Wayne POP	29.30	4	Complete	IFW (own)
Ft. Wayne POP to Ligonier POP	35.56	4	Complete	USSignal (IRU)
Ligonier POP to Elkhart Ring	33.58	4	Complete	USSignal (IRU)
Elkhart Ring	12.18	4	Complete	USSignal (IRU)
Elkhart Ring to South Bend Ring & POP	12.07	4	Complete	USSignal (IRU)
South Bend Ring	24.06	4	Complete	USSignal (IRU)
South Bend Ring to Michigan City POP	38.53	4	Complete	USSignal (IRU)
Michigan City POP to Gary POP	48.83	4	Complete	USSignal (IRU)
Gary POP to Crown Point	12.10	4	Complete	IFW (own)
Crown Point to Mt. Ayr Hut	36.50	4	Complete	IFW (own)
Mt. Ayr Hut to Delphi Hut (Hut by 3/04)	56.60	4	Complete	IFW (own)
Delphi Hut to Kirklin Hut	47.10	4	Complete	IFW (own)
Totals	836.05			

Total Fiber Miles from Indiana Fiber Work 3,344.20

* Fiber in these routes are owned by IFW and Smithville Telephone within a 50/50 partnership. The partnership is called VillageNet Services.

**Add: Map to show path
Identification of State Fibers**

TECHNICAL SPECIFICATIONS for I-Light 2 fiber

1. The maximum bi-directional average splice loss shall not exceed 0.15 dB.
2. At each splice point, sheathing shall be bonded to a ground of not greater than 20 Ohms.
3. All splices shall be sealed in water proof splice enclosures.
4. Between the wavelengths of 1300 nm and 1320 nm, fiber attenuation shall not exceed 0.4 dB/km for standard single-mode fiber and shall not exceed 0.5dB/km for True Wave, for temperatures between - 40 and +65C.
5. Between the wavelengths of 1540 nm and 1560 nm, fiber attenuation shall not exceed 0.3 dB/nm for temperatures between -40 and +65C and shall not exceed 0.25 dB/nm for True Wave.
6. The wavelength of zero fiber dispersion shall be between 1300 nm and 1320 nm for unshifted single-mode fiber. The wavelength of zero fiber dispersion shall be between 1535 nm and 1565 nm for True Wave. The slope of the dispersion curve at the wavelength of zero dispersion shall not exceed .10ps/nm/km.
7. The fiber dispersion at a wavelength of 1500 nm shall not exceed 5 ps/(nm*km).
8. The fiber cut-off wavelength shall be less than 1330 nm and greater than 1130 nm.
9. Fiber attenuation shall be uniform along its entire cable length. Attenuation discontinuities shall not exceed.1dB at either 1300 nm or 1550 nm as measured at any point along the fiber.

ACCEPTANCE TEST PLAN

I-LIGHT 2 Acceptance Test Plan consists of:

1. Non-destructive Attenuation Tests (End-to-End)
2. Optical Time Reflectometer Tests (OTDR)

Fiber acceptance testing will be performed to ensure that the State Fibers will operate within the parameters of the Specifications set forth in Exhibit B to this Agreement.

More specifically, fiber acceptance testing will include the following:

- 1) Continuity/Uniformity Tests:

All fibers shall be tested bi-directionally at 1310 nm or 1550 nm, as applicable, with an OTDR; the subsequent traces shall be inspected for end-to-end continuity and for uniform attenuation. These traces will be stored on diskette and will be compatible with laser precision PC-OTDR software.

- 2) Optical Length

The OTDR will be used to determine the end-to-end optical length of the cable.

- 3) Splice Loss:

Splice loss will be measured bi-directionally with an OTDR using the Splice Loss average method. The average splice loss shall be the measurement for splice loss set forth in Exhibit B to this Agreement.

- 4) End-to-End Loss

Using a light source and a power meter, the bi-directional, connector-to-connector attenuation will be measured for each fiber at 1310 nm and 1550 nm, as applicable. The acceptance average attenuation per kilometer on a per span basis shall be the attenuation set forth in Exhibit B to this Agreement.

LIST OF COLOCATION SPACES PROVIDED TO THE STATE PURSUANT TO ITS IRU

The following is a comprehensive list of Hub and Regeneration Locations available to the State as of the Execution Date of its Agreement. The State may select collocation rack space from this list, subject to availability of space at the time of selection.

<u>Facility Name and Address</u>	<u>Facility Name and Address</u>
Anderson Hub 26 Jackson St. Anderson, IN 46016	Martinsville Hub 2475 Old SR 37 South Martinsville, IN 46151
Batesville Hub 1297 Columbus Ave. Batesville, IN 47006	Mt. Ayr 5018 E. 500 S. Mt. Ayr, IN 47964
Bloomington 302 N. Walnut Bloomington, IN 47404	Muncie Hub 5000 N. Schaffer Muncie, IN 47303
Castleton Hub 8356 Masters Rd. Indianapolis, IN 462	Shelbyville Hub 2800 or 2575 Parkway Dr. Shelbyville, IN 46176
Columbus Hub 1830 7th St. Columbus, IN 47202	Fort Wayne Hub 5312 West Washington Center Road Fort Wayne, IN 46818
Delphi Hub(under construction) New York& Seventh Street Delphi, In 46923	Ligonier Hub 256 US 6 West Ligonier, IN 46767
Dawson St. 1829 Dawson St. Indianapolis, IN 46203	South Bend Carrier Hotel 506 W. South Street South Bend, IN 46601
Kirklin Hub 9280 N. SR 421 Kirklin, IN 46069	Michigan City Hub 9650 N. Meer Road Michigan City, IN 46360
Marion Hub 1604 W. 16th St. Marion, IN 46953	Gary Hub 3977 Massachusetts Gary, IN 46409
Markle Hub 4960 West 900 North 90 Markle, IN 46770	

COLLOCATION TERMS AND CONDITIONS

The terms and conditions of this Exhibit H apply to use by the State ("Customer") of space and services with a regeneration hut (the "Facility") owned by Vendor and operated as part of the Vendor Network.

1. Vendor hereby grants Customer a license to install, at a location within the Facility to be designated by Vendor, one locking telecommunications equipment cabinet (the "Cabinet") of industry standard twenty-three inch wide by seven foot high size that is to be supplied by Customer. Vendor may, upon not less than sixty (60) days written notice to Customer, require Customer to relocate the Cabinet to a different location within the Facility, provided that Vendor shall reimburse Customer for the actual and reasonable costs of performing such relocation work. The relocation shall be scheduled at a mutually acceptable time.

2. Customer has the right under this Agreement to use certain fiber optic cable strands that are or can be terminated within the Facility. Customer may at Customer's expense cause Customer's fibers to be extended to and terminated at the Cabinet. Customer shall install appropriate overhead racking, conduit or other means of protecting its fibers within the Facility, such installation to be compatible with the physical layout and improvements in the Facility and in compliance with industry standards and applicable codes. Customer shall at Customer's expense obtain necessary permits and cause the work to be performed to extend Customer's fibers to the Cabinet.

3. The term of Customer's license rights shall be co-terminous with the Term of this Agreement.

4. Throughout the Term, Customer shall pay Vendor, monthly in advance, the recurring charge ("MRC") specified in **IRU**. Any partial month shall be pro-rated.

5. Vendor shall install adequate DC power to the Cabinet with appropriate breaker controls. The first ten (10) amps of power load shall be covered by the MRC. If Customer's installed demand load, as reasonably estimated by Vendor based upon Customer's installed equipment, exceeds ten amps, Customer shall reimburse Vendor for the amount of its rated load in excess of ten amps, at the rate specified in **IRU**.

6. Customer may not install connections from the Cabinet to co-located equipment of third parties in the Facility without the prior written consent of Vendor, which shall not be unreasonably withheld. Vendor may condition such consent upon the payment of cross-connection fees.

7. Subject to compliance with general Facility and building security rules and procedures, Customer shall have access to the Cabinet 24 hours per day, 7 days per week. If any representative or contractor of Customer acts in a manner that is dangerous, in violation of industry standards or any law or code, or detrimental to the operation of the Facility, Vendor may bar that individual from the Facility and require that Customer cause its work to be performed by other individuals. Customer shall only allow to enter the Facility those individuals that have from time to time been identified to Vendor in written notice as being authorized by Customer to enter the Facility on behalf of Customer.

8. Vendor shall maintain air conditioning, back up power, fire suppression and other environmental controls in the Facility in compliance with industry standards.

9. Customer may from time to time install telecommunications equipment within the Cabinet. Such equipment shall be of appropriate type for use with Customer's fibers and within the Cabinet and the Facility, and shall not generate excessive heat or consume excessive electrical power, as judged by industry standards and the physical characteristics of the Cabinet and the Facility. Customer shall have the right to replace and remove its equipment from the Cabinet from time to time. Vendor hereby waives any claim of lien, whether statutory or contractual, against the Cabinet and Customer's equipment and acknowledges that those items shall remain the property of Customer or Customer's equipment lessor or lender, as the case may be. Within thirty (30) days after the end of the Term, Customer shall at Customer's expense remove the Cabinet and Customer's equipment from the Facility. If Customer fails timely to remove the Cabinet and/or any equipment, and if such failure continues for more than five (5) business days after written notice, Vendor may remove such Cabinet and/or equipment and keep or dispose of same without compensation to Customer.

10. Customer acknowledges that the Facility is a shared use environment and that Customer is responsible for insuring the Cabinet and Customer's equipment. Customer waives any claim against Vendor or Vendor's contractors for damage to the Cabinet or Customer's equipment, except to the extent that such damage is caused by the negligence or intentional acts or omissions of Vendor or Vendor's, employees, agents, or contractors. Customer shall be responsible for any damage to the premises or other equipment caused by Customer's personnel or contractors.